

Name _____

Exploring the Scientific Method: An Inquiry Based Challenge

In this lab, you will use the scientific method to answer a testable question.

Answer the questions under each step to guide your thought process as you design and conduct your experiment.

1. State the Problem

- What specific, testable problem are you trying to solve?

2. Research

- What background information would help you in designing your experiment?

3. Form a Hypothesis

- What is your specific hypothesis?

4. Test the Hypothesis

- Materials
 - List the supplies needed:
- Variables
 - Independent variable:
 - Dependent variable:
- Controls
 - Explain at least 3 controls

- Procedure (Experimental Design)
 - Explain step-by-step how you will conduct your experiment and analyze your results (be specific!)

- Results
 - Include a table AND graph with all necessary labels and units
 - Staple them to the back of this sheet
 - They can be done by hand on graph paper or electronically using Google Sheets (spreadsheet in Google Drive) and then printed

5. Draw a Conclusion

- What answer did you determine to your initial question?
 - Be sure to explain how you drew this conclusion based on your data